

DAMAGE RESISTANT PHOTOMASK CONSTRUCTION

ABSTRACT OF THE DISCLOSURE

A method for fabricating a damage resistant photomask includes forming a photomask pattern on a substrate and forming a transparent, protective coating on the photomask pattern. The protective coating may be an electrical insulator (e.g., spin-on glass). In addition, an antireflective layer may be applied to the protective coating. A pellicle may also be attached over the protective coating. The protective coating may prevent electrostatic energy from forming on or arcing between features on the photomask pattern and damaging the features. The protective layer may also prevent the photomask pattern from being damaged by or reacting with other substances, such as cleaning solutions.

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